

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) ~~Method~~ A method for reducing ~~[[the]]~~ a content of contaminating metals in ionic form present in aqueous effluents, ~~characterised in that it comprises the steps of comprising:~~

a) providing an aqueous effluent comprising at least a metal  $M_i$  in ionic form;

~~[[a)]]~~ (b) placing the aqueous effluent, ~~comprising at least a metal  $M_i$  in ionic form,~~ in contact with at least a metal  $M_h$  completely or partially coated with hydrogen before and/or during the placing in contact with the metal ion(s)  $M_i$ ; and

~~[[b)]]~~ (c) recovering ~~[[the]]~~ an aqueous effluent from which the metal  $M_i$  has been eliminated or its content reduced.

2. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal  $M_h$  comprises one or more metals selected from the group

consisting of elements of Groups Ib, IIb, IIIb, IVb, Vb, VIb, VIIb and VIII of the Periodic Table of elements.

3.(Currently Amended) ~~Method~~ The method according to claim 1 ~~characterised in that~~ wherein the metal  $M_h$  comprises one or more metals selected from the group consisting of elements of Groups Ib, VIIb and VIII of the Periodic Table of elements.

4.(Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal  $M_h$  comprises one or more metals selected from the group consisting of iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium and platinum.

5.(Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal  $M_h$  comprises one or more metals selected from the group consisting of nickel, cobalt, palladium, iridium, ruthenium, rhodium and platinum.

6.(Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal  $M_h$  comprises nickel.

7. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal  $M_h$  is completely or partially coated with hydrogen before being brought into contact with the metal ions  $M_i$  which are present in the aqueous effluent.

8. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal  $M_h$  is completely or partially coated with hydrogen during the placing in contact with the metal ions  $M_i$  which are present in the aqueous effluent.

9. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal ions  $M_i$  are the ionic forms of the elements or combinations of elements selected from the group consisting of scandium, yttrium, lanthanum, actinium, titanium, zirconium, hafnium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, manganese, technetium, rhenium, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium, platinum, copper, silver, gold, zinc, cadmium, mercury, ~~aluminium~~ aluminum, gallium, indium, thallium, silicon, germanium, tin, lead, arsenic, antimony, bismuth, selenium,

tellurium, le polonium, iodine, astatine, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium, thorium, protactinium, uranium, neptunium, plutonium, americium, curium, berkelium, californium, einsteinium, fermium, mendelevium, nobelium and lawrencium, alone or in admixture.

10. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal ions  $M_i$  are the ionic forms of the elements or combinations of elements selected from the group consisting of scandium, yttrium, lanthanum, actinium, titanium, zirconium, hafnium, vanadium, niobium, tantalum, chromium, molybdenum, tungsten, manganese, technetium, rhenium, iron, ruthenium, osmium, cobalt, rhodium, iridium, nickel, palladium, platinum, copper, silver, gold, zinc, cadmium, mercury, ~~aluminium~~ aluminum, gallium, indium, thallium, silicon, germanium, tin, lead, arsenic, antimony, bismuth, selenium, tellurium, polonium, iodine, astatine, cerium, europium, uranium, neptunium and plutonium, alone or in admixture.

11. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal ions  $M_i$

are the ionic forms of the elements or combinations of elements selected from the group consisting of titanium, vanadium, chromium, manganese, iron, cobalt, nickel, platinum, copper, silver, gold, zinc, cadmium, mercury, ~~aluminium~~ aluminum, lead, arsenic, antimony, bismuth, selenium, polonium, cerium, uranium, neptunium and plutonium, alone or in admixture.

12. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal ions  $M_1$  are the ionic forms of the elements or combinations of elements selected from the group consisting of tin, chromium, cobalt, nickel, copper, zinc, cadmium, mercury, lead, arsenic, antimony, selenium, polonium, uranium, neptunium and plutonium, alone or in admixture.

13. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the metal  $M_h$  is deposited on a support.

14. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that it~~ wherein the method is carried out at temperatures in the order of between

approximately 0°C and 200°C, ~~more particularly between~~  
~~approximately 0°C and approximately 80°C.~~

15. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that it~~ wherein the method is carried out with aqueous effluents whose pH value is in the order of between approximately 1 and approximately 14.

16. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterised in that~~ wherein the aqueous effluent to be processed is water from groundwater tables, surface water, water distribution networks or industrial water, waste water, slurries ~~[[and]]~~ or industrial waste.

17. (Withdrawn, Currently Amended) ~~Decontamination~~  
A decontamination kit comprising at least a metal  $M_h$ , which is intended to be ~~used~~ utilized in the method according to claim 1.

18. (New) The method according to claim 1, wherein the method is carried out at temperatures in the order of between approximately 0°C approximately 80°C.